ABSTRACT

The present invention is for an ultrasonic Doppler blood flow measurement device with which high-speed computation is possible, even when a memory having the characteristic of different read/write speeds in the row direction and the column direction is used for the buffer memory when computing blood flow information, without being affected by the slower read/write speed. It is provided with a large capacity memory section 10 that is constituted by a memory that has a two-dimensional address space and different data read/write speeds in the row direction and the column direction of that address space, and that stores detection signals, a blood flow computation section 6 that calculates blood flow information from the detection signals, a small capacity memory section 12 that has the capacity of at least the data amount required for the blood flow computation section 6 to compute any one depth point of an object to be examined, and a large capacity memory control section 9 that performs data transfer from the large capacity memory section 10 to the small capacity memory section 12 in the row direction only.